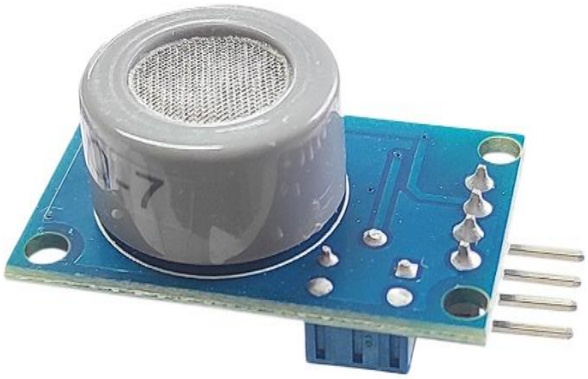
ADIY MQ7

Carbon Monoxide Gas Sensor Module



Description:

Sensitive material of MQ-7 gas sensor is SnO2, which with lower conductivity in clean air. It makes detection by method of cycling high and low temperature, and detect CO when low temperature (heated by 1.5V). The sensor's conductivity is higher along with the gas concentration rising. When high temperature (heated by 5.0V), it cleans the other gases adsorbed under low temperature. Please use simple electro circuit, convert change of conductivity to correspond output signal of gas concentration. MQ-7 gas sensor has high sensitivity to Carbon Monoxide. The sensor could be used to detect different gases contains CO, it is with low cost and suitable for different application.

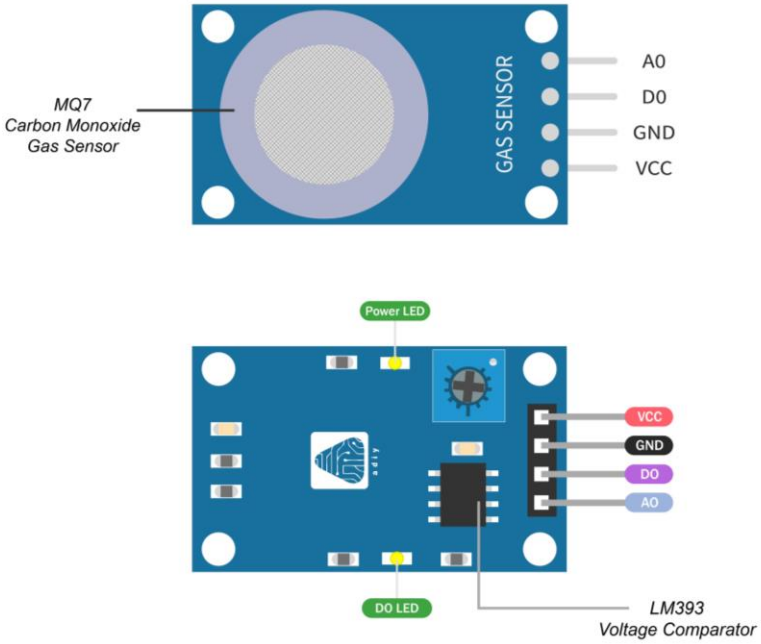
Features:

1. The carbon monoxide detection with better sensitivity
2. High sensitivity to Natural gas
3. Long life and low cost
4. Simple drive circuit
5. Rapid response and recovery characteristics.
6. There are four screw holes for easy positioning

Specification:

- Sensor type: Semiconductor
- Standard Encapsulation: Plastic
- Detection Gas: Carbon Monoxide
- Concentration: 10-10000ppm CO
- Operating Voltage: 5V ±0.2%
- Load Resistance: Adjustable
- Heater Resistance: 31Ω ±5%
- Heating Consumption: <350mw
- Sensing Resistance: 2K Ω - 20K Ω

Pin Configuration:



VCC: It is used to connect 5V to the sensor.

GND: It is used to connect GND to the sensor.

DO: It is a digital output Pin. From this pin, you will get digital data HIGH/LOW.

AO: It is analog output Pin. From this pin, you will get analog data.

How it works:

To use the Sensor Module, you have power the device with 5V supply and the Power LED will start to glow. To power it, you can use external supply or connect +5V and GND pin of microcontroller. You should give it some preheating time before start reading the output. While measuring the gas present, the Output LED will glow in a specific concentration of the gas. You can change it by using the potentiometer. Else you can also use the Analog Output to see how your program reacts to different concentrations of gases present.

Applications:

- Domestic gas leakage detector
- Industrial CO detector
- Portable gas detector